



CLARK COUNTY • DEPARTMENT OF AIR QUALITY
4701 W. Russell Road Suite 200 • Las Vegas, NV 89118-2231
(702) 455-5942 • Fax (702) 383-9994
Marci Henson Director

PART 70 OPERATING PERMIT

SOURCE ID: 1584

Silverhawk Generating Station
15111 Apex Power Parkway
Las Vegas, NV 89124

ISSUED ON: July 20, 2016

EXPIRES ON: July 19, 2021

Revised on: January 23, 2020

Current action: Minor Revision

Issued to:

Nevada Power Company, dba NV
Energy
6226 West Sahara Avenue
Las Vegas, Nevada 89146

Responsible Official:

Dariusz Rekowski

PHONE: (702) 402-5762 FAX: (702) 402-0835

EMAIL: DREKOWSKI@NVENERGY.COM

NATURE OF BUSINESS:

SIC codes 4911, "Electric Services"

NAICS codes 221112, "Fossil Fuel Electric Power Generation"

Issued by the Clark County Department of Air Quality in accordance with Section 12.5 of the Clark County Air Quality Regulations.

A handwritten signature in blue ink, reading "Theodore A. Lendis".

Theodore A. Lendis, Permitting Manager

EXECUTIVE SUMMARY

NV Energy's Silverhawk Generating Station (SGS) is an electrical power generating station located at 15111 Apex Power Parkway in North Las Vegas, Nevada. The legal description of the source location is as follows: portions of Township 18S, Range 63E, Section 5 in Apex Valley, County of Clark, State of Nevada. The source is situated in hydrographic area 216 (Garnett Valley). Garnett Valley is currently designated attainment for all regulated pollutants.

SGS is a major stationary source for PM₁₀, PM_{2.5}, NO_x, and CO and a minor source for SO₂, VOC, and HAPs pollutants. The generating station operates two 175 MW natural gas-fired combustion turbine generators, two heat recovery steam generators with natural gas-fired duct burners, one steam turbine generator, one 3-cell, 6,600 gpm cooling tower, one 100 hp LPG-fired emergency generator, one 250 hp diesel-powered fire pump, and a 2,206 hp diesel emergency generator. The potential electrical generating capacity of the source is above 250 MMBtu/hr. As a result, the source is a categorical source, as defined by AQR 12.2.2(j)(1). SGS is also a source of GHG pollutants.

The turbines are subject to the requirements of 40 CFR Part 60, Subparts A and GG, the heat recovery steam generators to the turbines are subject to 40 CFR Part 60, Subparts A and Da, the fire pump and emergency generator are subject to 40 CFR Part 63, Subpart ZZZZ, the 2019 diesel emergency generator is subject to 40 CFR Part 60, Subpart IIII, and the facility is subject to 40 CFR Part 72 and 75.

The following table summarizes SGS's potential-to-emit for each regulated air pollutant for all emission units identified by this Part 70 OP. These emission rates are for reference purposes only and are not intended to be enforced by direct measurement unless otherwise noted in Section III below.

| PM ₁₀ | PM _{2.5} | NO _x | CO | SO ₂ | VOC | HAP | GHG ¹ |
|------------------|-------------------|-----------------|--------|-----------------|-------|------|------------------|
| 149.00 | 149.00 | 318.91 | 562.38 | 10.35 | 85.57 | 5.39 | 1,955,775.63 |

¹Expressed as metric tons of CO₂e

DAQ will continue to require sources to estimate their GHG potential to emit in terms of each individual pollutant (CO₂, CH₄, N₂O, CF₆ etc.) and the TSD includes these PTEs for informational purposes.

Pursuant to AQR 12.5.2, all terms and conditions in Sections I through VI and Attachments 1 and 2 are federally enforceable unless explicitly denoted otherwise.

TABLE OF CONTENTS

| | | |
|-------------|--|-----------|
| I. | ACRONYMS | 4 |
| II. | GENERAL CONDITIONS | 5 |
| A. | General Requirements | 5 |
| B. | Modification, Revision, Renewal Requirements..... | 5 |
| C. | Reporting/Notifications/Providing Information Requirements | 6 |
| D. | Compliance Requirements | 7 |
| E. | Performance Testing Requirements | 9 |
| III. | EMISSION UNITS AND APPLICABLE REQUIREMENTS | 10 |
| A. | Emission Units | 10 |
| B. | Emission Limitations and Standards | 10 |
| 1. | Emission Limits..... | 10 |
| 2. | Operational Limits..... | 11 |
| 3. | Emission Controls | 12 |
| C. | Monitoring..... | 14 |
| D. | Testing | 15 |
| E. | Record Keeping..... | 16 |
| F. | Reporting | 17 |
| G. | Mitigation | 18 |
| IV. | ACID RAIN REQUIREMENTS..... | 18 |
| V. | OTHER REQUIREMENTS..... | 19 |
| VI. | PERMIT SHIELD | 19 |
| | ATTACHMENT 1 – APPLICABLE REGULATIONS..... | 21 |
| | ATTACHMENT 2 – ACID RAIN PERMIT APPLICATION | 22 |

I. ACRONYMS

Table I-1: List of Acronyms and Abbreviations

| Acronym | Term |
|-------------------|---|
| APP | Application |
| AQR | Clark County Air Quality Regulations |
| ATC | Authority to Construct |
| CAAA | Clean Air Act, as amended, or Clean Air Act Amendments |
| CEMS | Continuous Emissions Monitoring System |
| CF ₆ | Carbon Fluoride |
| CFC | Chlorofluorocarbon |
| CFR | United States Code of Federal Regulations |
| CH ₄ | Methane |
| CO | Carbon Monoxide |
| CO ₂ | Carbon Dioxide |
| DAQ | Clark County Department of Air Quality |
| dscf | Dry Standard Cubic Feet |
| DOM | Date of Manufacturer |
| EPA | United States Environmental Protection Agency |
| EU | Emission Unit |
| GHG | Greenhouse Gases |
| HAP | Hazardous Air Pollutant |
| HCFC | Hydrochlorofluorocarbon |
| HHV | High Heating Value |
| hp | Horse Power |
| HRSG | Heat Recovery Steam Generator |
| MMBtu | Millions of British Thermal Units |
| MW | Megawatt |
| N ₂ O | Nitrous Oxide |
| NAICS | North American Industry Classification System |
| NESHAP | National Emission Standard for Hazardous Air Pollutants |
| NO _x | Nitrogen Oxides |
| NRS | Nevada Revised Statutes |
| NSPS | New Source Performance Standards |
| O ₂ | Oxygen |
| OP | Operating Permit |
| PM _{2.5} | Particulate Matter less than 2.5 microns |
| PM ₁₀ | Particulate Matter less than 10 microns |
| ppmvd | Parts per Million, Volumetric Dry |
| PSD | Prevention of Significant Deterioration |
| PTE | Potential to Emit |
| QA/QC | Quality Assurance/Quality Control |
| QAP | Quality Assurance Plan |
| RATA | Relative Accuracy Test Audit |
| RMP | Risk Management Plan |
| scf | Standard Cubic Feet |
| SCR | Selective Catalytic Reduction |
| SIC | Standard Industrial Classification |
| SIP | State Implementation Plan |
| SO _x | Sulfur Oxides |
| TDS | Total Dissolved Solid |
| TSD | Technical Support Document |
| U.S.C. | United States Code |
| VOC | Volatile Organic Compound |

II. GENERAL CONDITIONS

A. General Requirements

1. The permittee shall comply with all conditions of the Part 70 OP. Any permit noncompliance may constitute a violation of the Clark County Air Quality Regulations (AQRs), Nevada law, and the Clean Air Act, and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; revision; or denial of a permit renewal application. *[AQR 12.5.2.6(g)(1)]*
2. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall be unaffected and shall remain valid. *[AQR 12.5.2.6(f)]*
3. The permittee shall pay all permit fees pursuant to AQR Section 18. *[AQR 12.5.2.6(h)]*
4. The permit does not convey any property rights of any sort, or any exclusive privilege. *[AQR 12.5.2.6(g)(4)]*
5. The permittee agrees to allow inspection of the premises to which this permit relates by any authorized representative of the Control Officer at any time during the permittee's hours of operation without prior notice. The permittee shall not obstruct, hamper, or interfere with any such inspection. *[AQR 4.3.3; AQR 4.9; AQR 5.1.1, AQR 12.5.2.8(b)]*
6. The permittee shall allow the Control Officer, upon presentation of credentials to: *[AQR 4.3 and 12.5.2.8(b)]*
 - a. Have access to and copy any records that must be kept under the conditions of the permit;
 - b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - c. Sample or monitor substances or parameters for the purpose of assuring compliance with the permit or applicable requirements; and
 - d. Document alleged violations using devices such as cameras or video equipment.
7. Any permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit. A responsible official shall certify the additional information consistent with the requirements of AQR Section 12.5.2.4. *[AQR 12.5.2.2]*
8. Anyone issued a permit under AQR 12.5 shall post it in a location where it is clearly visible and accessible to facility employees and DAQ representatives. *[AQR 12.5.2.6(m)]*

B. Modification, Revision, Renewal Requirements

1. No person shall begin actual construction of a new Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an Authority to Construct Permit (ATC) from the Control Officer. *[AQR 12.4.1.1(a)]*

2. The permit may be revised, revoked, reopened and reissued, or terminated for cause by the Control Officer. The filing of a request by the permittee for a permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, does not stay any permit condition. *[AQR 12.5.2.6(g)(3)]*
3. A permit, permit revision, or renewal may be approved only if all of the following conditions have been met: *[AQR 12.5.2.10(a)]*
 - a. The permittee has submitted to the Control Officer a complete application for a permit, permit revision, or permit renewal, except that a complete application need not be received before a Part 70 general permit is issued pursuant to Section 12.5.2.20; and
 - b. The conditions of the permit provide for compliance with all applicable requirements and the requirements of Section 12.5
4. The permittee shall not build, erect, install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere reduces or conceals an emission, which would otherwise constitute a violation of an applicable requirement. *[AQR 80.1 and 40 CFR 60.12]*
5. No permit revisions shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. *[AQR 12.5.2.6(i)]*
6. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. *[AQR 12.5.2.11(b)]*
7. For purposes of permit renewal, a timely application is a complete application that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. If a source submits a timely application under this provision, it may continue operating under its current Part 70 OP until final action is taken on its application for a renewed Part 70 OP. *[AQR 12.5.2.1(a)(2)]*

C. Reporting/Notifications/Providing Information Requirements

1. The permittee shall submit all compliance certifications to the U.S. Environmental Protection Agency (EPA) and to the Control Officer. *[AQR 12.5.2.8(e)(4)]*
2. Any application form, report, or compliance certification submitted to the Control Officer pursuant to the permit or AQRs shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under AQR 12.5 shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *[AQR 12.5.2.6(l)]*
3. The permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Control Officer copies of records required to be kept by the permit, or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. *[AQR 12.5.2.6(g)(5)]*

4. Upon request of the Control Officer, the permittee shall provide such information or analyses as will disclose the nature, extent, quantity or degree of air contaminants which are or may be discharged by such source, and type or nature of control equipment in use, and the Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to such report, the Control Officer may designate an authorized agent to make an independent study and report as to the nature, extent, quantity or degree of any air contaminants which are or may be discharged from the source. An authorized agent so designated is authorized to inspect any article, machine, equipment, or other contrivance necessary to make the inspection and report. *[AQR 4.4]*
5. The permittee shall submit to the Control Officer, within 15 days of commencing operations, any outstanding identification and/or description that was not previously available for new emission unit(s), as noted in this permit with “TBD.” *[AQR 12.5.2.3.(f)]*
6. The permittee shall submit annual emissions inventory reports that meet the following requirements: *[AQR 18.6.1]*
 - a. The annual emissions inventory must be submitted to DAQ by March 31 of each calendar year (if March 31 falls on a Saturday or Sunday, or on a federal or Nevada holiday, the submittal shall be due on the next regularly scheduled business day);
 - b. The calculated actual annual emissions from each emission unit (EU) shall be reported, even if there was no activity, along with the total calculated actual annual emissions for the source based on the CEMS, the emissions calculation methodology used to establish the PTE in the permit or an equivalent method approved by the Control Officer prior to submittal; and
 - c. The first page of text will be a signed certification containing the sentence: “I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate, and complete.” This statement shall be signed and dated by a responsible official of the company (a sample form is available from DAQ).

D. Compliance Requirements

1. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. *[AQR 12.5.2.6(g)(2)]*
2. Any person who violates any provision of the AQR, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry or monitoring activities or any requirements by DAQ is guilty of a civil offense and shall pay civil penalty levied by the Air Pollution Control Hearing Board and/or the Hearing Officer of not more than \$10,000. Each day of violation constitutes a separate offense. *[AQR 9.1; NRS 445B.640]*
3. Any person aggrieved by an order issued pursuant to AQR Section 9.1 is entitled to review as provided in Chapter 233B of NRS. *[AQR 9.12]*
4. The permittee shall comply with the requirements of Title 40, Part 61 of the Code of Federal Regulations (40 CFR Part 61), Subpart M—the National Emission Standard for Asbestos—for all demolition and renovation projects. *[AQR 13.1(b)(8)]*

5. The permittee shall certify compliance with terms and conditions contained in the Part 70 OP, including emission limitations, standards, work practices, and the means for monitoring such compliance. *[AQR 12.5.2.8(e)]*
6. The permittee shall submit compliance certifications annually in writing to the Control Officer (4701 W. Russell Road, Suite 200, Las Vegas, NV 89118) and the Region 9 Administrator (Director, Air and Toxics Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each calendar year will be due on January 30 of the following year, and shall include the following: *[AQR 12.5.2.8(e)]*
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. These methods and means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements described in 40 CFR Part 70.6(a)(3). If necessary, the permittee shall also identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the Clean Air Act, which prohibits knowingly making a false certification or omitting material information; and
 - c. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in Section II.D.6(b) of this permit. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify, as possible exceptions to compliance, any periods during which compliance was required and in which an excursion or exceedance, as defined under 40 CFR Part 64, occurred.
7. The permittee shall report to the Control Officer (4701 West Russell Road, Suite – 200, Las Vegas, Nevada 89118) any startup, shutdown, malfunction, emergency or deviation which cause emissions of regulated air pollutants in excess of any limits set by regulation or by this permit. The report shall be in two parts as specified below: *[AQR 12.5.2.6(d)(4)(B) and AQR 25.6.1]*
 - a. Within twenty-four (24) hours of the time the permittee learns of the excess emissions, the report shall be communicated by phone (702) 455-5942, fax (702) 383-9994, or email: airquality@clarkcountynv.gov; and
 - b. Within seventy-two (72) hours of the notification required by paragraph (a) above, the detailed written report containing the information required by AQR Section 25.6.3 shall be submitted.
8. With the semiannual monitoring report, the permittee shall report to the Control Officer all deviations from permit conditions that do not result in excess emissions, including those attributable to malfunction, startup, or shutdown. Reports shall identify the probable cause of each deviation and any corrective actions or preventative measures taken. *[AQR 12.5.2.6(d)(4)(B)]*
9. The owner or operator of any source required to obtain a permit under AQR 12 shall report to the Control Officer any emissions in excess of an applicable requirement or emission limit that pose a potential imminent and substantial danger to public health and safety or the environment as soon as possible, but no later than 12 hours after the deviation is discovered, and submit a written report within two days of the occurrence. *[AQR 25.6.2]*

E. Performance Testing Requirements

1. Upon request of the Control Officer, the permittee shall test or have tests performed to determine the emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of that allowed by the Air Quality regulations is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. *[AQR 4.5]*
2. Upon request of the Control Officer, the permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. *[AQR 4.6]*
3. The permittee shall submit for approval a performance testing protocol which contains testing, reporting, and notification schedules, test protocols, and anticipated test dates to the Control Officer not less than 45, nor more than 90, days prior to the anticipated date of the performance test, unless otherwise specified in Section III.D of this permit. *[AQR 12.5.2.8]*
4. The permittee shall submit to EPA for approval any alternative test methods that are not already approved by EPA, to demonstrate compliance with a requirement under 40 CFR Part 60. *[40 CFR Part 60.8(b)]*
5. The permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days from the end of the performance test. *[12.5.2.8]*

III. EMISSION UNITS AND APPLICABLE REQUIREMENTS

A. Emission Units

The stationary source covered by this Part 70 OP is defined to consist of the emission units and associated appurtenances summarized in Table III-A-1. [AQR 12.5.2.3]

Table III-A-1: List of Emission Units

| EU | Description | Rating | Make | Model # | Serial # |
|-----|---|--------------|-----------------------------|-----------|-------------------|
| A01 | Natural Gas-Fired Turbine | 175 MW | Westinghouse | 501FD | 37A-8193-1 |
| A02 | Duct-Burner Heat Recovery Steam Generator (associated with A01) | 530 MMBtu/hr | Alstom | | |
| A03 | Natural Gas-Fired Turbine | 175 MW | Westinghouse | 501FD | 37A-8194-1 |
| A04 | Duct-Burner Heat Recovery Steam Generator (associated with A03) | 530 MMBtu/hr | Alstom | | |
| A05 | Diesel-Powered Fire Pump; DOM: 2004 | 250 hp | Clarke | JU6HUF50 | PE6068TF234110 |
| A06 | LPG-Powered Emergency Engine; DOM: 2004 | 100 hp | Generac | SG060 | 2072892 |
| A07 | Three-Cell Cooling Tower; 0.001% Drift Loss; 8,144 ppm TDS | 6,600 gpm | International Cooling Tower | FCC-12-03 | FCC-12-03-8434-03 |
| A08 | Emergency Generator | 1,500 kW | Caterpillar | 3512C | TBD |
| | Diesel-Powered Engine; DOM: 2019 | 2,206 hp | | TBD | TBD |

The units in Table III-A-2 are present at this source, but are insignificant activities pursuant to AQR Section 12.5. The emissions from these units or activities, when added to the PTE of the source, will not make the source major for any additional pollutant.

TABLE III-A-2: Summary of Insignificant Activities

| Description |
|---|
| Mobile Combustions Sources |
| Station Maintenance Activities |
| Maintenance Shop Activities (e.g., part washers, sand blasters, etc.) |
| Steam Cleaning Operations |
| LPG Tank, 500 gallons |
| Diesel Tank, 280 gallons |
| Lube oil sumps and vents |
| Portable gas-fired pump, 3.5 hp |

B. Emission Limitations and Standards

1. Emission Limits

Turbines

- The permittee shall not allow the actual emissions, including the emissions from startup and shutdown, from EUs A01, A02, A03, and A04 to exceed the PTE listed in Table III-B-1 during any consecutive 12-month period. [AQR 12.5.2.6(b)]

Table III-B-1: Emission Unit PTE, Including Startup and Shutdowns (tons per year)¹

| EU | PM ₁₀ /PM _{2.5} | NO _x | CO | SO ₂ | VOC |
|-----------|-------------------------------------|-----------------|--------|-----------------|-------|
| A01 + A02 | 73.80 | 154.10 | 280.40 | 5.10 | 42.60 |
| A03 + A04 | 73.80 | 154.10 | 280.40 | 5.10 | 42.60 |
| A05 | 0.14 | 1.94 | 0.42 | 0.13 | 0.16 |
| A06 | 0.01 | 0.77 | 0.10 | 0.01 | 0.02 |
| A07 | 1.20 | 0.00 | 0.00 | 0.00 | 0.00 |
| A08 | 0.05 | 8.00 | 1.06 | 0.01 | 0.19 |

¹Annual emissions for turbine/duct burner pairs (A01/A02) and (A03/A04) are based on normal operations including 2,000 hours of turbines operating with duct firing at 100 percent load and 900 hours of start-up/shut-down cycles.

- b. The permittee shall calculate and log all startup and shutdown emissions, except for those emissions which can be recorded using CEMS, for purposes of demonstrating compliance with the annual PTE and startup/shutdown cycling hours per year for the source. *[NSR ATC/OP Modification 0, Amendment 3, Condition II-B-4 (12/04/06)]*
- c. The permittee shall not allow actual emissions from each emission unit to exceed the PTE listed in Table III-B-2. Pound-per-hour limits are normal operation limits only (exclude startup and shutdown). *[AQR 12.5.2.6(b)]*

Table III-B-2: Emission Unit PTE (pounds per hour)¹

| EU | NO _x | CO | SO ₂ | VOC |
|---------|-----------------|------|-----------------|-----|
| A01+A02 | 23.0 | 22.4 | 1.5 | 6.4 |
| A03+A04 | 23.0 | 22.4 | 1.5 | 6.4 |

¹Only emission units that require performance testing are included in this table.

- d. The permittee shall not allow the emission limits for NO_x and CO, outlined in Table III-B-3, to be exceeded for any three (3) hour rolling averaging period as determined by the CEMS as described in Section III-C, excluding any startup or shutdown periods. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-B-7 (12/04/06)]*

Table III-B-3: Emission Rates for each Turbine and Duct Burner¹

| | NO _x @ 15% O ₂ | CO @ 15% O ₂ | VOC @ 15% O ₂ |
|---------------------|--------------------------------------|-------------------------|--------------------------|
| With Duct firing | 2.5 ppmvd | 4 ppmvd | 2.0 ppmvd |
| Without Duct Firing | 2.5 ppmvd | 4 ppmvd | 2.0 ppmvd |

¹Limits based on normal operations, 3-hour averaging period

Other

- e. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. *[AQR 26.1.1]*

2. Operational Limits

Turbines

- a. The permittee shall limit each combustion turbine generator to the manufacturer's maximum heat input rating of 1,980 MMBtu/hr (HHV) at 67°F and a maximum heat input of 15,840,000 MMBtu per year during any consecutive 12-month period. (EUs: A01 and A03). *[NSR ATC/OP Modification 0, Amendment 3, Condition III-A-1 (12/04/06)]*

- b. The permittee shall limit each duct burner to the manufacturer's maximum heat input rating of 530 MMBtu/hr (HHV) and a maximum heat input of 1,060,000 MMBtu per year during any consecutive 12-month period. (EUs: A02 and A04). *[NSR ATC/OP Modification 0, Amendment 3, Condition III-A-2 (12/04/06)]*
- c. The permittee shall limit each duct burner (EU: A02 and A04) to a maximum of 2,000 hours per year during any consecutive 12-month period. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-A-2 (12/04/06)]*
- d. Startup shall be defined as the period beginning with ignition and lasting until a turbine (EU: A01 or A03) has reached a continuous and stable operating level, and the catalyst has reached optimal operating temperature. Shutdown means the period beginning with the lowering of the electric load of a turbine below 50 percent of nameplate capacity and ending when combustion has ceased. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-A-4 (12/04/06)]*

Fire Pump/Emergency Generators

- e. The permittee shall limit the operation of the diesel-fired fire pump (EU: A05) for testing and maintenance purposes to 100 hours/year. The permittee may operate the fire pump(s) up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. *[40 CFR Part 63, Subpart ZZZZ]*
- f. The permittee shall limit the operation of the propane-fired emergency generators (EU: A06) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generators up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. The emergency generator(s) cannot be used for peak shavings or demand response, nor to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity. *[40 CFR Parts 63.6585 & 63.6640 (Subpart ZZZZ)]*
- g. The permittee shall limit the operation of the diesel-fired emergency generator (EU: A08) for testing and maintenance to 100 hours/year. The permittee may operate the emergency generator up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. The emergency generator(s) cannot be used for peak shavings or demand response. *[40 CFR Part 60, Subpart IIII]*

3. Emission Controls

Turbines

- a. The permittee shall control NO_x exhaust emissions from each turbine and duct burner with dry low-NO_x combustors and a SCR system installed and operated in accordance with manufacturer's specifications and good operating practice. The NO_x exhaust emissions may be further controlled by operation of a pilot water injection system, operated as needed to ensure the NO_x emission limits as outlined in this Part 70 Operating Permit are not exceeded. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-B-1 (12/04/06)]*
- b. The permittee shall operate each SCR system whenever the associated turbine unit or duct burner is operating, excluding startups and shutdowns. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-B-2 (12/04/06)]*

- c. The permittee shall install oxidation catalysts for the control of CO and VOCs on each of turbine unit/duct burner (EU: A01/A02 and A03/A04) and shall be maintained and operated in accordance with manufacturer's specifications. The oxidation catalysts shall be operated at all times the associated turbine unit/duct burner is operating, excluding periods of startup and shutdown. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-B-4 (12/04/06)]*
- d. The permittee shall control SO₂ emissions from each combined cycle system by exclusive use of pipeline-quality natural gas and by applying good combustion practices. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-B-8 (12/04/06)]*
- e. The sulfur content of natural gas fuel shall not exceed an average concentration of 0.75 grains per 100 dscf per year. The permittee shall verify compliance with the fuel gas sulfur content in accordance with 40 CFR 60.334(h). *[NSR ATC/OP Modification 0, Amendment 3, Condition III-C-5 (12/04/06)]*
- f. The permittee shall control PM₁₀ emissions from each combined cycle system by properly maintaining the inlet air filters preceding each turbine per manufacturer's specifications. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-B-9 (12/04/06)]*
- g. The permittee shall not construct combustion turbine/HRSG exhaust stacks to exceed a maximum height of 150 feet above grade or a maximum diameter of 18 feet. Any change in stack height or diameter, as modeled in the application, will require a revision to this Part 70 Operating Permit. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-B-13 (12/04/06)]*

Fire Pump

- h. The permittee shall operate the diesel fire pump (EU: A05) with a turbocharger, aftercooler, and timing retardation, *[NSR ATC/OP Modification 0, Amendment 3, Condition III-A-7 (12/04/06)]*
- i. The permittee shall operate and maintain the fire pump (EU: A05) in accordance with the manufacturer's specifications. *[AQR 12.5.2.6(a)]*
- j. The fire pump (EU: A05) is subject to the provisions of 40 CFR Part 63, Subpart ZZZZ and shall comply with the following requirements:
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - ii. Inspect air cleaners every 1,000 hours of operation or annually, whichever comes first;
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and
 - iv. Install a nonresettable hour meter, if one is not already installed.

Emergency Generator

- k. The permittee shall combust only propane in the emergency generator (EU: A06). *[NSR ATC/OP Modification 0, Amendment 3, Condition III-A-8 (12/04/06)]*
- l. The permittee shall operate and maintain the propane-fired emergency generator (EU: A06) in accordance with the manufacturer's specifications. *[AQR 12.5.2.6(a)]*
- m. The propane emergency generator (EU: A06) is subject to the provisions of 40 CFR Part 63, Subpart ZZZZ and shall comply with the following requirements:
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - ii. Inspect air cleaners every 1,000 hours of operation or annually, whichever comes first;
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and
 - iv. Install a nonresettable hour meter, if one is not already installed.

- n. The permittee shall operate the diesel emergency generator (EU: A08) with a turbocharger and aftercooler. *[ATC APP for Major Sources October 7, 2019]*
- o. The permittee shall operate and maintain the diesel emergency generator (EU: A08) in accordance with the manufacturer's specifications. *[ATC APP for Major Sources October 7, 2019, 40 CFR 60.4211(a)(1)]*

Cooling Tower

- p. The permittee shall operate the cooling tower (EU: A07) with drift eliminators that have a manufacturer's maximum drift rate of 0.001 percent. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-B-14 (12/04/06)]*
- q. The permittee shall limit the TDS of the cooling tower water (EU: A07) to a maximum concentration of 8,144 ppm, with a circulation rate not to exceed 6,600 gallons per minute. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-B-14 (12/04/06)]*
- r. The permittee shall operate and maintain the cooling tower (EU: A07) in accordance with the manufacturer's specifications. *[AQR 12.5.2.6(a)]*
- s. The permittee shall use no chromium containing compounds for water treatment in any cooling towers. *[AQR 12.5.2.6(a)]*

C. Monitoring

- 1. To demonstrate continuous direct compliance with all emission limitations for NO_x and CO specified in this permit, the permittee shall install, calibrate, maintain, operate, and certify CEMS for NO_x, CO, and O₂ on each stationary gas turbine unit in accordance with both 40 CFR Part 60 and 40 CFR Part 75. Each CEMS shall include an automated data acquisition and handling system. Each system shall monitor and record at least the following data: *[AQR 12.5.2.6(d)]*
 - a. exhaust gas concentrations of NO_x, CO, and diluent O₂ for all turbine units (EUs: A01, A02, A03, and A04);
 - b. exhaust gas flow rate (by direct or indirect methods);
 - c. fuel flow rate and type;
 - d. hours of operation;
 - e. 3-hour rolling averages for each NO_x and CO concentration;
 - f. Hourly mass emissions of NO_x and CO; and
 - g. hours of downtime of the CEMS.
- 2. The permittee shall maintain and adhere to the latest QAP for all CEMS, submitted to and approved by DAQ that includes auditing and reporting schedules, reporting schedules, design specifications, and other quality assurance requirements for each CEMS. *[40 CFR Part 75]*
- 3. The permittee shall conduct periodic audit procedures and QA/QC procedures for CEMS conforming to the provisions of 40 CFR Part 60: Appendix F or 40 CFR Part 75: Appendix B, as applicable. *[AQR 12.5.2.6(d)]*
- 4. The permittee shall conduct relative accuracy test audits (RATA) of the NO_x, CO and O₂ CEMS as required at least every four calendar quarters, except in the case where the affected facility is off-line (does not operate) in the fourth calendar quarter since the quarter of the previous RATA. In that case, the RATA shall be performed in the quarter in which the unit recommences operation. *[40 CFR Part 60, Appendix F 5.1.1 and 5.1.4]*

5. The permittee shall conduct RATA of the CO, NO_x, and diluent O₂ CEMS at least annually. *[AQR 12.5.2.6(d)]*
6. The permittee shall verify compliance with the SO₂ emission limitations specified in permit, when operating natural gas, by utilizing fuel which meets the definition of natural gas per 40 CFR Part 60.331(u) and that the maximum total sulfur content of the fuel is 0.75 grains/100 scf or less in accordance through 40 CFR Part 60.334(h). *[AQR 12.5.2.6(a)]*
7. The permittee shall determine the natural gas heating value and consumption rates for all turbine units. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-B-6 (12/04/06)]*
8. The permittee shall monitor the natural gas fuel flow rate of each turbine and each duct burner with a continuous monitoring system. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-E-9 (12/04/06)]*

Fire Pump/Generators

9. The permittee shall operate the fire pump and emergency generator (EUs: A05, A06, and A08) with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. *[40 CFR Part 63, Subpart ZZZZ, 40 CFR Part 60, Subpart IIII]*

Cooling Tower

10. The permittee shall record TDS levels or conductivity of the cooling tower water at least once during every 24-hour period. A conductivity meter may be used for testing purposes. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-E-10 (12/04/06)]*

Other

11. The permittee shall perform at least one visual emissions observation on a plant-wide level each calendar quarter. Quarterly visual observations shall include the fire pump and emergency generator (EUs: A05, A06, and A08) while operating to demonstrate compliance with the opacity limit. If any of the fire pump and/or emergency generator does not operate during the calendar quarter, then no observation of that unit shall be required. If visible emissions are observed, then corrective actions shall be taken to minimize the emissions and, if practicable, the opacity of emissions shall be visually determined in accordance with 40 CFR Part 60 Appendix A: Reference Method 9. *[AQR 12.5.2.6 and 40 CFR Part 70.6]*

D. Testing

1. The permittee is subject to performance testing in accordance with 40 CFR 60 Subpart A; 40 CFR Part 60 Subpart GG; 40 CFR Part 60 Subpart Da; 40 Part CFR 72; and *Clark County Department of Air Quality Guideline for Source Testing (2/21/2019)*. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-D-1 (12/04/06)]*
2. The permittee shall utilize performance testing as an initial instrument for determining compliance with the applicable emission limitations set forth in Tables III-B-1 through III-B-3 of this Part 70 Operating Permit. This does not, however, preclude the use of other credible evidence in determining or showing compliance. *[NSR ATC/OP 1584 Modification 0, Amendment 3, Condition III-D-6 (12/04/06)]*
3. The permittee conducted initial performance tests for NO_x, CO, VOCs and opacity on both turbine units and associated duct burners. Performance testing for NO_x, CO, and VOCs demonstrated compliance with the part-per-million and pound-per-hour limits outlined in this permit. Initial performance testing for VOCs on the turbine units was twofold, and consisted of testing with duct

burners on and duct burners off. The initial performance testing requirement was met on January 9, 2004. *[NSR ATC/OP Modification 0, Amendment 3, Condition III-D-4 (12/04/06)]*

4. The Control Officer may require additional performance testing when operating conditions appear to be inadequate to demonstrate compliance with the limitations in this permit. *[AQR 4.5]*

E. Recordkeeping

1. The permittee shall maintain records on-site that include: *[AQR 12.5.2.6]*

Turbines and Burners

- a. hourly quantity of natural gas consumed in each turbine;
- b. hourly quantity of natural gas consumed in each duct burner;
- c. monthly heating value of natural gas;
- d. sulfur content of natural gas;
- e. summary of items required by Condition III-C-1;
- f. dates, times and duration of each startup and shutdown cycle;
- g. startup and shutdown emissions per stationary gas turbine for each cycle event and annual emissions in tons per year (consecutive 12-month total);
- h. time, duration, nature and probable cause of any CEMS downtime and corrective actions taken;
- i. CEMS audit results, RATA, corrective actions, etc, as required by 40 CFR Part 60 and the CEM QAP;
- j. each CEMS "out-of-Control" period, as defined in 40 CFR Part 75, Appendix B;

Fire Pump/Generators

- k. records of inspections and maintenance (EUs: A05, A06, and A08);
- l. records demonstrating date and interval of oil and filter change, inspection of air cleaners and inspection of hoses and belts *[40 CFR 63 Subpart ZZZZ]* (EUs: A05 and A06);
- m. manufacturer's engine specifications (EUs: A05, A06, and A08);

Cooling Tower

- n. daily TDS content or conductivity of cooling tower circulation water;

Other

- o. log of visible emission checks;
- p. all CEMS information required by 40 CFR Part 75, including a CEMS monitoring plan;
- q. certificates of representation for the designated representative and the alternate designated representative that meet all requirements of 40 CFR 72.24;
- r. copies of all reports, compliance certifications, other submissions and all records made or required under the Acid Rain Program;
- s. copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program; and
- t. results of all performance testing and RATA.

2. The permittee shall maintain records on-site that require semiannual reporting and include, at a minimum: *[AQR 12.5.2.6]*
 - a. monthly, consecutive 12-month total quantity of natural gas consumed in each turbine;
 - b. monthly, consecutive 12-month total quantity of natural gas consumed in each duct burner;
 - c. monthly, consecutive 12-month total hours of operation of each duct burner;
 - d. CEMS audit results or accuracy checks, corrective actions, etc., as required by 40 CFR Part 60, Appendix F and the CEMS Quality Assurance Plan;
 - e. Monthly, consecutive 12-month total NO_x and CO mass emission including startup, shutdown and normal operations in tons;
 - f. annual hours of operation of the fire pump and emergency generators for testing, maintenance, and nonemergency use (EUs: A05, A06, and A08);
 - g. date and duration of operation of the fire pump and emergency generators for emergency use, including documentation justifying use during the emergency (EUs: A05, A06, and A08);
 - h. the magnitude and duration of excess emissions, notifications, monitoring system performance, malfunctions, corrective actions taken, etc., as required by 40 CFR 60.7; and
 - i. monthly calculation of emissions with 12-month consecutive totals for each pollutant and emission unit listed in Table III-A-1.
3. For all inspections, visible emission checks, and testing required under monitoring, logs, reports, and records shall include at least the date and time, the name of the person performing the action, the results or findings, and the type of corrective action taken (if required). *[AQR 12.5.2.6]*
4. Records and data required by this operating permit to be maintained by permittee may, at the permittee's expense, be audited at any time by a third party selected by the Control Officer. *[AQR 4.4 and AQR 12.5.2.8(b)]*
5. All records and logs, or a copy thereof, shall be kept on-site for a minimum of five (5) years from the date the measurement was taken or data was entered and shall be made available to DAQ upon request. *[AQR 12.5.2.6]*
6. The Control Officer reserves the right to require additional requirements concerning records and record keeping for this source. *[AQR 12.5.2.6]*

F. Reporting

1. All report submissions shall be addressed to the attention of the Control Officer. *[AQR 12.5.2.6(d), AQR 14.3, AQR 21.4, and AQR 22.4]*
2. All reports shall contain a certification of truth, accuracy, and completeness by the responsible official. *[AQR 12.5.2.6 and AQR 12.5.2.6(l)]*
3. The permittee shall submit semiannual reports to the Control Officer. *[AQR 12.5.2.6(d)]*
4. The following requirements apply to semiannual reports: *[AQR 12.5.2.6(d)]*
 - a. The report shall include items listed in Section III-E-2.
 - b. The report shall include summaries of any permit deviations, their probable cause, and corrective or preventative actions taken.
 - c. The report shall be submitted to DAQ within 30 calendar days after the end of the reporting period.

5. Regardless of the date of issuance of this permit, the schedule for the submittal of reports to the Control Officer shall be as outlined in Table III-F-1: *[AQR 12.5.2.6(d)]*

Table III-F-1: Reporting Schedule

| Required Report | Applicable Period | Due Date |
|--|--|--|
| Semiannual Report for 1 st half of year | January, February, March, April, May, June | July 30 th each year ¹ |
| Semiannual Report for the 2 nd half of the year (Any additional annual records required) | July, August, September, October, November, December | January 30 th each year ¹ |
| Annual Compliance Certification | Calendar Year | January 30 th each year ¹ |
| Annual Emission Inventory Report | Calendar Year | March 31 st each year ¹ |
| Excess Emission Notification | As Required | Within 24 hours of the time the permittee first learns of the excess emissions |
| Excess Emission Report | As Required | Within 72 hours of the notification |
| Deviation Report | As Required | Along with semiannual reports ¹ |
| Performance Testing | As Required | Within 60 days from the end of the test ¹ |
| RATA Testing | As Required | Within 45 days from the end of the test ¹ |

¹If the due date falls on a Saturday, Sunday or a Federal or Nevada holiday, then the submittals are due on the next regularly scheduled business day.

6. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit conditions, permit requirements, and requirements of applicable federal regulations. *[AQR 4.4 and AQR 12.5.2.6(d)]*
7. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72 and 40 CFR Part 75. *[40 CFR Part 72.9(f)]*

G. Mitigation

1. The source has no federal offset requirements. *[AQR 59.1.1]*

IV. ACID RAIN REQUIREMENTS

1. In accordance with the provisions of Title IV of the Clean Air Act and 40 C.F.R. Parts 72 through 77, this Acid Rain Permit is issued to NV Energy, Silverhawk Power Plant.
2. All terms and conditions of the permit are enforceable by DAQ and EPA under the Clean Air Act. *[40 CFR Part 72]*
3. The permittee shall comply with all the applicable requirements of the Acid Rain Permit Application located in Attachment 2. *[40 CFR Part 72.30]*
4. This Acid Rain permit incorporates the definitions of terms in 40 CFR Part 72.2.
5. This permit is valid for a term of five (5) years from the date of issuance unless a timely and complete renewal application is submitted to DAQ. *[40 CFR Part 72.69]*

6. A timely renewal application is an application that is received at least six months prior to the permit expiration date. *[40 CFR Part 72.30]*
7. Emissions from this source shall not exceed any allowances that the source lawfully holds under Title IV of the Act or its regulations. *[AQR 12.5.2.6 and 40 CFR Part 70.6(a)(4)]*

V. OTHER REQUIREMENTS

1. The permittee shall not use, sell, or offer for sale any fluid as a substitute material for any motor vehicle, residential, commercial, or industrial air conditioning system, refrigerator freezer unit, or other cooling or heating device designated to use a CFC or HCFC compound as a working fluid, unless such fluid has been approved for sale in such use by the Administrator. The permittee shall keep record of all paperwork relevant to the applicable requirements of 40 CFR Part 82 on site. *[40 CFR Part 82]*

VI. PERMIT SHIELD

Compliance with the terms contained in this permit shall be deemed compliance with the following applicable requirements in effect on the date of permit issuance: *[AQR 12.5.2.9]*

Table VI-1: Applicable Requirements Related to Permit Shield

| Citation | Title |
|--------------------------------|--|
| AQR Section 14.1.3 Subpart Da | NSPS – Electric Utility Steam Generation |
| AQR Section 14.1.40 Subpart GG | NSPS – Stationary Gas Turbines |

Table V-2: Streamlined requirements Related to Permit Shield

| EU | Regulation (40 CFR) | Regulatory Standard | Permit Limit | Value Comparison (in Units of the Permit Limit) | | | Averaging Period Comparison | | | Streamlining Statement for Shielding Purposes |
|----------|------------------------|--|--|--|--------------------------|---|---------------------------------|--|---|---|
| | | | | Standard Value | Permit Limit Value | Is Permit Limit Equal or More Stringent? | Standard Averaging Period | Permit Limit Averaging Period | Is Permit Limit Equal or More Stringent? | |
| A01/ A02 | 60.332 (GG) | 75 ppmvd NO _x @ 15% O ₂ ¹ | 2.5 ppmvd NO _x @ 15% O ₂ | 75 ¹ | 2.5 | Yes | 4 hour | 3 hour | Yes | The permit limits are more stringent than the standard based upon both concentration and averaging time. Compliance with the permit demonstrates compliance with the standard. |
| A03/ A04 | | | | | | | | | | |
| A01/ A02 | 60.333 (GG) | .15% by volume SO ₂ @ 15% O ₂ | 1.5 lbs/hr SO _x @ 15% O ₂ | 428 ² | 1.5 | Yes | 4 hour | 1 hour | Yes | |
| A03/ A04 | | | | | | | | | | |
| A01/ A02 | 60.333 (GG) | 0.8% Sulfur by weight (280 gr/100 scf) | 0.75 gr/100 scf | 280 | 0.75 | Yes | 4 hour | rolling 12- month | Yes | |
| A03/ A04 | | | | | | | | | | |
| A03/ A04 | | | | | | | | | | |
| A01/ A02 | 60.42 (Da) | 20% Opacity | 20% Opacity | 20 | 20 | Yes | 6 minute block | 6 minute roling | Yes | |
| A03/ A04 | | | | | | | | | | |
| A01/ A02 | 60.43 (Da) | 0.20 lb SO ₂ /MMBt u | 1.5 lb/hr SO ₂ | 106 ² | 1.5 | Yes | 30-day rolling | 1 hour | Yes | |
| A03/ A04 | | | | | | | | | | |
| A03/ A04 | | | | | | | | | | |
| A01/ A02 | 60.44 (Da) | 1.6 lb NO _x /MW- hr | 23 lb/hr NO _x | 248 ³ | 23 | Yes | 30-day rolling | 1 hour | Yes | |
| A03/ A04 | | | | | | | | | | |

ATTACHMENT 1 – APPLICABLE REGULATIONS

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE:

1. NRS, Chapter 445B.
2. Applicable AQR Sections:

| Citation | Title |
|-------------------------|---|
| AQR Section 00 | Definitions |
| AQR Section 4 | Control Officer |
| AQR Section 5 | Interference with Control Officer |
| AQR Section 8 | Persons Liable for Penalties – Punishment: Defense |
| AQR Section 9 | Civil Penalties |
| AQR Section 10 | Compliance Schedule |
| AQR Section 12.4 | ATC Application and Permit Requirements for Part 70 Sources |
| AQR Section 12.5 | Part 70 OP Requirements |
| AQR Section 13.2(b)(82) | NESHAP - Stationary Reciprocating Internal Combustion Engines |
| AQR Section 14.1(b)(3) | NSPS – Standards of Performance for Electric Utility Steam Generating Units |
| AQR Section 14.1(b)(40) | NSPS – Standards of Performance for Stationary Gas Turbines |
| AQR Section 14.1(b)(81) | NSPS - Stationary Reciprocating Internal Combustion Engines |
| AQR Section 18 | Permit and Technical Service Fees |
| AQR Section 21 | Acid Rain Continuous Emissions Monitoring |
| AQR Section 22 | Acid Rain Permits |
| AQR Section 25 | Upset/Breakdown, Malfunctions |
| AQR Section 26 | Emissions of Visible Air Contaminants |
| AQR Section 28 | Fuel Burning Equipment |
| AQR Section 40 | Prohibition of Nuisance Conditions |
| AQR Section 41 | Fugitive Dust |
| AQR Section 42 | Open Burning |
| AQR Section 43 | Odors in the Ambient Air |
| AQR Section 70 | Emergency Procedures |
| AQR Section 80 | Circumvention |

3. CAAA, Authority: 42 U.S.C. § 7401, et seq.
4. Applicable 40 CFR Subsections:

| Citation | Title |
|------------------------------|--|
| 40 CFR Part 52.21 | PSD |
| 40 CFR Part 52.1470 | SIP Rules |
| 40 CFR Part 60, Subpart A | NSPS – General Provisions |
| 40 CFR Part 60, Subpart Da | NSPS - Standards of Performance for Electric Utility Steam Generating Units |
| 40 CFR Part 60, Subpart GG | NSPS – Standards of Performance for Stationary Gas Turbines |
| 40 CFR Part 60, Subpart IIII | NSPS - Standards of Performance for Stationary Reciprocating Internal Combustion Engines |
| 40 CFR Part 60 | Appendix A, Method 9 or equivalent, (Opacity) |
| 40 CFR Part 63, Subpart ZZZZ | National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines |
| 40 CFR Part 70 | Federally Mandated Operating Permits |
| 40 CFR Part 72 | Acid Rain Permits Regulation |
| 40 CFR Part 73 | Acid Rain Sulfur Dioxide Allowance System |
| 40 CFR Part 75 | Acid Rain Continuous Emission Monitoring |
| 40 CFR Part 82 | Protection of Stratospheric Ozone |

Facility (Source) Name (from STEP 1) Silverhawk Generating Facility

Permit Requirements

STEP 3

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Silverhawk Generating Facility
Facility (Source) Name (from STEP 1)

Page 3

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
- (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
- (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission

Silverhawk Generating Facility
Facility (Source) Name (from STEP 1)

of a new certificate of representation changing the designated representative;

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements, Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with

Silverhawk Generating Facility
Facility (Source) Name (from STEP 1)

any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

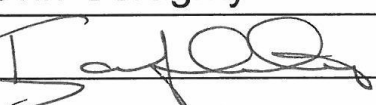
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the
certification
statement,
sign, and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | | |
|-----------|---|----------------|
| Name | Kevin Geraghty | |
| Signature |  | Date 11/2/2015 |